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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,714	01/05/2001	David T. Berquist	55350US6B014	5169
32692	7590	12/27/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			BANGACHON, WILLIAM L	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,714

Applicant(s)

BERQUIST ET AL.

Examiner

William Bangachon

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-16,18,19,22-27 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-16,18,19,22-27 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's argument filed 9/29/2005 have been fully considered but are not persuasive and is moot in view of the new ground(s) of rejection.

In this case, applicant argues that Francis et al describes a user interface that displays the distance to a sought object relative to the current location of the interrogator, not relative to a representation of the interrogation area scanned by the interrogator, and therefore do not suggest a user interface as claimed in the instant invention. The Examiner respectfully traverse applicant's arguments in that, Francis et al describes a graphical user interface that provides a visual display of instructions to an operator that includes the proposed identity of an object (item of interest) and a proposed location of the object, which is obviously scanned by the interrogator, to one of ordinary skill in the art.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

Art Unit: 2635

F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 4, 6-9, 10-12, 15, 18, 22, 23, 24-25, 27 and 31 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the combination of claims 1, 5, 7, 12, 16-18, 21 and 24-26 of U.S. Patent No. 6,600,418. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the conflicting claims are not identical, the claims are directed to a common subject matter (i.e. RFID interrogator having visual display as an aid in tracking objects), and it would have been obvious to one of ordinary skill in the art to have a graphical user interface as claimed, in the system of Francis et al, because Francis et al describes a graphical user interface that provides a visual display of instructions to an operator that includes the proposed identity of an object and a proposed location of the object, that is scanned by an interrogator.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 2635

5. Claims 1, 4-16, 18-19, 22-27 and 33, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claims 1, 10, 15, 18, 22, 24 and 27, it is unclear in the claims how the location of the item of interest within the interrogation area is determined, in such a way that the displayed distance of the item of interest is not relative to the current location of the interrogator, as argued by the applicant [Remarks, paragraph bridging pages 2 and 3; page 3, 2nd paragraph]. It is unclear in the claims how the location of the sought object (item of interest) is determined if it is with respect to a representation of an interrogation area and not relative to the current location of the interrogator (i.e. claimed RFID interrogation source). There is no indication in the claims on whether the item of interest is interrogated by the interrogation source. Further, it is unclear in the claims whether the interrogation area is caused by the interrogation source. There is no indication in the claims on whether the interrogation source caused the interrogation area to be displayed. Dependent claims 4-9, 11-14, 16, 19 and 25-26 are rejected for the same reasons.

In claim 23, the recited “**user interface**” lacks structural cooperative relationship among the elements in the claim.

In claim 33, it is unclear in the claims on how the RFID reader accounts for missing intermediate items, as claimed.

Claim Rejections - 35 USC § 103

Art Unit: 2635

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,640,002 (Ruppert et al) in view of USP 3,893,099 (Zoepfl).

Art Unit: 2635

In claim 23, Ruppert et al teach of a RFID reader (314) comprising:

(a) an RFID interrogation source {col. 22, lines 59-65; col. 23, lines 6-10; col. 44, lines 63-67};

(b) a processor (320);

(c) a display (figures 1 and 13; figures 16 and 19: 308, 328); and

(e) a user interface (328, 308A, 308B)

Ruppert et al do not disclose expressly **“an audio signal produced repeatedly at a desired interval to pace a user as to the speed at which RFID tags should be interrogated”**. In this case, Zoepfl is relied upon to teach of an audio signal produced repeatedly at a desired interval, as claimed {Zoepfl, col. 1, lines 40-45; col. 3, lines 7+}. Zoepfl teach that these features are useful where individuals compete against time to complete a specified task, which may be divided into defined distance increments {Zoepfl, col. 2, lines 14-19}. Clearly, these features are desirable in the system of Ruppert et al where a shopper may be competing against time or is in a hurry to complete his chores. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to have **“an audio signal produced repeatedly at a desired interval”** as claimed, in the system of Ruppert et al, because these features are useful where individuals compete against time to complete a specified task, which may be divided into defined distance increments, as taught by Zoepfl.

10. Claims 23 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,689,238 (Cannon, Jr. et al) in view of USP 3,893,099 (Zoepfl).

In claims 23 and 31, Cannon, Jr. et al teach of a RFID reader (Figures 1, 4, 6) comprising:

(a) an RFID interrogation source (20, 21);

(b) a processor (40);

(c) a display (22, 41); and

(e) a user interface for displaying a visual indication of tag proximity, such as signal strength, or an indication of distance to the tag {col. 2, lines 53+; paragraph bridging cols. 3 and 4}.

In claim 23, Cannon et al discloses emitting a sound to indicate relative proximity to a tag {col. 2, lines 50-53} but do not disclose expressly **“an audio signal produced repeatedly at a desired interval to pace a user as to the speed at which RFID tags should be interrogated”**. In this case, Zoepfl is relied upon to teach of an audio signal produced repeatedly at a desired interval, as claimed {Zoepfl, col. 1, lines 40-45; col. 3, lines 7+}. Zoepfl teach that these features are useful where individuals compete against time to complete a specified task, which may be divided into defined distance increments {Zoepfl, col. 2, lines 14-19}. Clearly, these features are desirable in the system of Cannon et al where a user may be competing against time or is in a hurry to complete his chores. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to have **“an audio signal produced repeatedly at a desired interval”** as claimed, in the system of Cannon et al, because these features are useful where individuals compete against time to complete a specified task, which may be divided into defined distance increments, as taught by Zoepfl.

Art Unit: 2635

In claim 31, although Cannon, Jr. et al do not disclose expressly **“a measurable unit”**, it would have been obvious to one of ordinary skill to recognize that signal strength is a measurable unit for indicating distance.

In claims 32-33, although Cannon, Jr. et al do not disclose expressly **“the measurable unit is a number of items”** it would have been obvious to one of ordinary skill in the art to correlate a number of items to the distance calculated with the signal strength wherein the items have equal thickness and that each item would have an associated tag to account for missing items.

Examiner Contact Information

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William Bangachon whose telephone number is (571)-272-3065. The Examiner can normally be reached on 4/4/1010.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Horabik can be reached on (571)-272-3068. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular and After Final formal communications. The Examiner's fax number is (571)-273-3065 for informal communications.

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2635

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6071.



William Bangachon
Examiner
Art Unit 2635

December 23, 2005



BRIAN ZIMMERMAN
PRIMARY EXAMINER
MINER